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      8 Mar 24
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                 structures available in REGISTRY
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NEWS 11 Apr 14 MEDLINE Reload
NEWS 12 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 13 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14 Apr 21 New current-awareness alert (SDI) frequency in
                 WPIDS/WPINDEX/WPIX
NEWS 15 Apr 28 RDISCLOSURE now available on STN
NEWS 16 May 05 Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 17 May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 18 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19 May 19
                Simultaneous left and right truncation added to WSCA
NEWS 20 May 19 RAPRA enhanced with new search field, simultaneous left and
                 right truncation
NEWS 21
        Jun 06
                Simultaneous left and right truncation added to CBNB
NEWS 22 Jun 06 PASCAL enhanced with additional data
NEWS 23 Jun 20 2003 edition of the FSTA Thesaurus is now available
NEWS 24 Jun 25 HSDB has been reloaded
NEWS 25 Jul 16 Data from 1960-1976 added to RDISCLOSURE
NEWS 26 Jul 21 Identification of STN records implemented
NEWS 27
        Jul 21 Polymer class term count added to REGISTRY
NEWS 28 Jul 22
                 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
                 Right Truncation available
NEWS 29 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
                 August 1, 2003
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003 NEWS HOURS STN Operating Hours Plus Help Desk Availability

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SESSION

ENTRY

0.21

FILE 'HOME' ENTERED AT 10:16:08 ON 13 AUG 2003

=> FIL REGISTRY FULL ESTIMATED COST

SINCE FILE COST IN U.S. DOLLARS

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STRUCTURE FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6 DICTIONARY FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Uploading 09936975.str

L1 STRUCTURE UPLOADED

STR

=> d 11 L1 HAS NO ANSWERS L1

Structure attributes must be viewed using STN Express query preparation.

 $\dot{N}o_2$

13/08/2003Page 3 10:20 <golam shameer 08/13/2003

SAMPLE SEARCH INITIATED 10:16:40 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS SEARCH TIME: 00.00.01

9 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

PROJECTED ITERATIONS: 1248 TO 2392 PROJECTED ANSWERS:

9 TO 360

9 SEA SSS SAM L1

=> s 11 sss full

FULL SEARCH INITIATED 10:16:47 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1852 TO ITERATE

100.0% PROCESSED 1852 ITERATIONS

SEARCH TIME: 00.00.01

158 ANSWERS

158 SEA SSS FUL L1

=> s 13

SAMPLE SEARCH INITIATED 10:16:51 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS SEARCH TIME: 00.00.01

9 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE** PROJECTED ITERATIONS: 1248 TO 9 TO

9 SEA SSS SAM L1

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 148.15 148.36

FULL ESTIMATED COST

PROJECTED ANSWERS:

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360

FILE COVERS 1907 - 13 Aug 2003 VOL 139 ISS 7 FILE LAST UPDATED: 12 Aug 2003 (20030812/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
13/08/2003Page 4 10:20 <golam shameen 08/13/2003
=> s 13
L5
=> s 15 and amino(w)acid?
         939778 AMINO
             43 AMINOS
         939796 AMINO
                   (AMINO OR AMINOS)
        4337168 ACID?
         591117 AMINO(W) ACID?
             12 L5 AND AMINO (W) ACID?
=> s 16 and glycine
         127931 GLYCINE
           1650 GLYCINES
         128626 GLYCINE
                   (GLYCINE OR GLYCINES)
L7
               4 L6 AND GLYCINE
=> s 16 and GABA
          33619 GABA
             11 GABAS
          33622 GABA
                   (GABA OR GABAS)
               3 L6 AND GABA
=> d 18 ibib abs hitstr tot
    ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                            2002:814100 CAPLUS
DOCUMENT NUMBER:
                            137:325331
TITLE:
                            Preparation of 7-nitroindoline derivatives for use as
                            photochemical precursors cabable of releasing
                            broactive effector moieties
                           Corrie, John Edgar Thomas; Papageorgiou, George
INVENTOR (S):
PATENT ASSIGNEE(S):
SOURCE:
                            PCT Int. Appl., 24 pp.
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                                APPLICATION NO. DATE
                                                 -----
          2002083639 A1 2002L024 WO 2002-GB971 20020308
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
     WO 2002083639
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
              TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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GB 2001-9093

CASREACT 137:325331; MARPAT 137:325331

A 20010411

PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

GΙ

13/08/2003Page 5 10:20 <qolam shameem:08/13/2003

AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline (e.g., I; wherein R1 = alkoxy or substituted alkoxy group, R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, arl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-text-butoxycarbonyl)-4-(text-butoxycarbonylamino)|butanoyl]-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl4 to give, among other products, 43% 1-{[S-(4-text-butoxycarbonyl)-4-(text-butoxycarbonyl)amino)|butanoyl]-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive amino acids or metal chelators to sites

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of nitroindole derivs. by nitration with copper(II) nitrate and

13/08/2003Page 6 10:20 <golam shameen 08/13/2003

acetic anhydride)

RN 444189-55-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

38 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:759359 CAPLUS

DOCUMENT NUMBER: 136:210906

TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-

amino acids as novel, fast caged

neurotransmitters

AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

CORPORATE SOURCE: National Institute for Medical Research, London, NW7

SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42 CODEN: JNMEDT; ISSN: 0165-0270

PUBLISHER: Elsevier Science B.V. DOCUMENT TYPE: Journal

LANGUAGE: English
AB Reagents capable of rapid and efficient release of neuroactive

amino acids (L-glutamate, GABA and glycine)
upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI)-caged and 4-methoxy-7-nitroindolinyl (MNI) - caged compds. that fulfil these criteria are evaluated here. caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time.ltoreq.0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

IT 239135-33-2 239135-34-3 295325-62-1
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

13/08/2003Page 7 10:20 <golam shameen 08/13/2003

(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as notel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel,

fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS

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CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 402470-76-2 CAPLUS

REFERENCE COUNT:

CN 1H-Indole-5-acetic acid, 1-(aminoacety1)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

22 THERE ARE 22 CITED REPERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS OF STN ACCESSION NUMBER: 2000:666708 CAPLUS

DOCUMENT NUMBER: 133:252301

TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bloactive effector moieties.

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 70 pp.

DOCUMENT TYPE: CODEN: PIXXD2
DAMBULY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT	NO.		KI	ND :	DATE			A:	PPLI	CATI	N NC	ο.	DATE			
					-			-								
WO 200	00551	33	A	1 (2000	0921		W	0 20	00-G	B103	9	2000	0320		
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,
	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,
	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,
	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM						
RW	: GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF.	ВJ.	CF,
	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
EP 1161418			A1 20011212					EP 2000-911095 20000320								
R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

13/08/2003Page 9 10:20 <golam shameer 08/13/2003

IE, FI JP 2002539196 T2 20021119 JP 2000-605564 20000320 PRIORITY APPLN. INFO.: GB 1999-6192 A 19990318 W 20000320 GTHER SOURCE(S): MARPAT 133:252301 GTHER SOURCE(S): MARPAT 133:252301

R1 R2 R3 NO2

AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, o(CH2)nY; N(CO2) (CH2)mY, N[CM2)mY1][(CH2)mY1, R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, CO2H, salts thereof, OPO32-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradan, typically by flash irradn. with UN light, were prepd. I can be used to deliver biol. active effector moieties such as neuroactive amino acids or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO3 in CF3CO2H to give Me 1- (4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolyzed in ammonium phosphate

was 80%.
1 239135-32-1P 239135-33-2P 239135-34-3P
239135-30-8P 295325-58-5P 295325-59-6P
295325-60-9P 295325-61-0P 295325-62-1P
295325-63-2P 295325-64-3P 295325-65-4P
295325-66-8P 295325-67-6P 295325-68-7P
295325-69-8P 295325-77-8P 295325-74-5P
295325-96-3P 295325-77-8P 295325-78-9P

I

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-32-1 CAPLUS

CM

1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME) 13/08/2003Page 10 10:20 <golam shameemb8/13/2003

$$\begin{array}{c} \text{MeO-C-CH}_2 \\ \text{NO}_2 \end{array} \begin{array}{c} \text{C-(CH}_2)_3 - \text{CO}_2\text{H} \end{array}$$

RN 239135-33-2 CAPLUS CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} 0 \\ \text{MeO-C-CH}_2 \\ \\ NO_2 \end{array} \qquad \begin{array}{c} C - (\text{CH}_2)_4 - \text{OPO}_3\text{H}_2 \\ \end{array}$$

RN 239135-34-3 CAPLUS CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 239135-39-8 CAPLUS CN

1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, 13/08/2003Page 11 10:20 <golam shame 08/13/2003

methyl ester (9CI) (CA INDEX NAME)

RN 295325-59-6 CAPLUS
CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]eth
oxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-,
.alpha.-methyl ester (9CI) (CA INDEX NAME)

RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-61-0 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

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RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \hline \\ NO_2 & C- (\text{CH}_2)_4 - \text{OPO}_3\text{H}_2 \\ \hline \\ 0 & \end{array}$$

RN 295325-65-4 CAPLUS

CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]-(9CI) (CA

13/08/2003Page 13 10:20 <golam shame 08/13/2003

INDEX NAME)

RN 295325-66-5 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-(9CI) (CA INDEX NAME)

RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)

13/08/2003Page 14 10:20 <golam shameemu8/13/2003

Me No
$$_{\rm NO_2}$$
 $_{\rm O}^{\rm C-}$ (CH₂) $_{\rm 4}-{\rm OPO_3H_2}$

RN 295325-69-8 CAPLUS

CN Glycine, N-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]-(9CI) (PA INDEX NAME)

RN 295325-72-3 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-74-5 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{Ho_2C-CH_2} & & & \\ & \operatorname{No_2} & & & \\ & & \operatorname{C-(CH_2)_4-OPO_3H_2} \end{array}$$

13/08/2003Page 15 10:20 <golam shame 08/13/2003

RN 295325-75-6 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-0x0-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} \overset{\circ}{\text{MeO-C-CH}_2} \\ & \overset{\circ}{\text{NO}_2} \\ & \overset{\circ}{\text{NO}_2} \\ & \overset{\circ}{\text{NO}_2} \\ \end{array}$$

•2 Na

RN 295325-77-8 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 Na

RN 295325-78-9 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

13/08/2003Page 16 10:20 <golam shame: 08/13/2003

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

RN 295325-73-4 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.8)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 17 ibib abs hitstr tot

ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

9

ACCESSION NUMBER: 2002:814100 CAPLUS DOCUMENT NUMBER: 137:325331

TITLE:

Preparation of 7-nitroindoline derivatives for use as photochemical precursors cabable of releasing bjoactive effector moieties Corrie, John Edgar Thomas; Papageorgiou, George Medical Research Council, UK

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT I	NO.		KI	ND I	DATE			A	PPLI	CATI	N NC	o. 1	DATE			
									-								
WO :	2002	0836	39	A:	1 :	2002	1024		W	20	02 - G	B971	:	2002	308		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,
		TJ,	TM														
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ΜL,	MR,	NE,	SN,	TD,	TG
PRIORITY APPLN. INFO.:									GB 2001-9093			A 20010411					
OTHER SO	URCE	(S):			CAS	REAC'	T 13	7:32	5331	; MA	RPAT	137	:325	331			
GI																	

A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and

13/08/2003Page 18 10:20 <golam shame: 08/13/2003

R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl-4-(tert-butoxycarbonylamino)]butancyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl4 to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butancyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moleties such as neuroactive amino acids or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 444189-55-3P

 ${\tt RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)}$

(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and acetic anhydride)

RN 444189-55-3 CAPLUS
CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester,
(.alpha.S)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 2001:759359 CAPLUS DOCUMENT NUMBER: 136:210906 TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinylamino acids as novel, fast caged neurotransmitters ATTTHOR (S) . Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D. CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42 CODEN: JNMEDT: ISSN: 0165-02 \$0 PUBLISHER: Elsevier Science B.V. DOCUMENT TYPE: Journal LANGUAGE: English Reagents capable of rapid and efficient release of neuroactive

amino acids (L-glutamate, GABA and glycine)
upon flash photolysis of thermally stable, inert precursors have been
elusive. 7-Nitroindolinyl (NI) -caged and 4-methoxy-7-nitroindolinyl (MNI) -caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time.ltoreg.0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes. 239135-33-2 239135-34-3 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS CN 1H-Indole-5-acetic a

1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME) 13/08/2003Page 20 10:20 <golam shame: 08/13/2003

RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-62-1 CAPLUS

2N 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic

fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ MeO-C-CH_2 \\ \hline \\ NO_2 \\ \hline \\ O \end{array}$$

402470-76-2 CAPLUS RN

CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

22 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2003 ACS on STN ANSWER 3 OF 4 ACCESSION NUMBER: 2000:666708 CAPLUS

DOCUMENT NUMBER: 133:252301

TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive

THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

effector moieties. Corrie, John Edgar Thomas; Papageorgiou, George Medical Research Council, UK PCT Int. Appl., 70 pp. INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

REFERENCE COUNT:

	PAT	ENT	NO.		KIN	ND.	DATE			A.	PPLI	CATIO	ON NO). I	DATE			
						-												
	WO 2000055133			A1		20000921		WO 2000-GB1039 20000320										
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
			CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
			ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,
			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,
			SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,
			ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM						
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
	EP 1161418								EP 2000-911095 20000320									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	FI														
JP 2002539196 T2 20021119 JP 2000-605564 20000320																		
PRIORITY APPLN. INFO.: GB 1999-6192 A 19990318																		

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WO 2000-GB1039 W 20000320

OTHER SOURCE(S):

MARPAT 133:252301

AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [1; R1, R4 = H, (substituted) alkyl, O(CH2)NY; N(CO2) (CH2)MY, N[(CH2)MY], R1, R4 = H, (substituted) alkyl; R2R3 = Cycloalkyl; m, n = 1-10; Y, Y1 = H, CO2H, salts thereof, OPO32-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irrada, typically by flash irrada, with UV light, were prepd. I can be used to deliver biol. active effector moieties such as neuroactive amino acids or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO3 in CF3CO2H to give Me 1- (4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38 photolyzed ir ammonium phosphate

T 239135-32-1P 239135-33-2P 239135-34-3P 239135-39-6P 295325-58-5P 295325-59-6P 295325-66-3P 295325-62-1P 295325-66-5P 295325-64-3P 295325-66-5P 295325-66-3P 295325-66-4P 295325-66-5P 295325-72-3P 295325-74-5P 295325-75-6P 295325-77-8P 295325-78-9P 295325-88-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BSU (Biological use, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-32-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitrodelta.-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C-CH}_2 \\ \text{NO}_2 \\ \end{array} \quad \begin{array}{c} \text{C-(CH}_2)_3 - \text{CO}_2\text{H} \\ \end{array}$$

RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-

13/08/2003Page 23 10:20 <golam shame: 08/13/2003

(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C-CH}_2 \\ \text{NO}_2 \end{array} \qquad \begin{array}{c} \text{C-(CH}_2)_4 - \text{OPO}_3 \text{H}_2 \\ \end{array}$$

RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \overset{\circ}{\text{Neo-C-CH}_2} \\ \underset{\text{No}_2}{\overset{\circ}{\text{No}_2}} & \overset{\circ}{\text{C-(CH}_2)_3-\text{NH}_2} \end{array}$$

13/08/2003Page 24 10:20 <golam shame 08/13/2003

- RN 295325-59-6 CAPLUS
- CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]eth oxylphenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, alpha.-methyl ester (9CI) (CA INDEX NAME)

- RN 295325-60-9 CAPLUS
- CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

- RN 295325-61-0 CAPLUS
- CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

- RN 295325-62-1 CAPLUS
- CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

13/08/2003Page 25 10:20 <golam shameem08/13/2003

RN

295325-63-2 CAPLUS 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) CN (CA INDEX NAME)

295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-(9CI) (CA INDEX NAME)

oMe
$$\begin{array}{c} \text{NO}_2 \\ \text{NO}_2 \\ \end{array} \begin{array}{c} \text{C} - (\text{CH}_2)_4 - \text{OPO}_3 \text{H}_2 \\ \text{O} \end{array}$$

RN 295325-65-4 CAPLUS

CN (2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} & \text{Ho}_2\text{C}-\text{CH}_2 \\ \\ \text{O}_2\text{N} & \text{C}-\text{CH}_2-\text{N} \\ \\ \text{O}-\text{CH}_2-\text{CH}_2-\text{O}_2\text{H} \\ \\ \text{CH}_2-\text{CO}_2\text{H} \end{array}$$

13/08/2003Page 26 10:20 <goliam shame: 08/13/2003

RN 295325-66-5 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7nitro-.delta.-oxo-, (.alpha.s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me NH2 NH2
$$_{\rm NO_2}$$
 O $_{\rm CO_2H}$

RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobuty1)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-(9CI) (CA INDEX NAME)

ome
$$\begin{array}{c} \text{OMe} \\ \text{NO}_2 \\ \text{NO}_2 \\ \text{O} \end{array}$$

RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonooxy) pentyl] - (9CI) (CA INDEX NAME)

Me No
$$_{\rm NO_2}$$
 $_{\rm O}^{\rm C-}$ (CH2) $_{\rm 4}^{\rm -}$ OPO $_{\rm 3}$ H2

RN 295325-69-8 CAPLUS

CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

13/08/2003Page 27 10:20 <golam shameem08/13/2003

RN 295325-72-3 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-,
methyl ester (9CI) (CA INDEX NAME)

RN 295325-74-5 CAPLUS CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

RN 295325-75-6 CAPLUS
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA
INDEX NAME)

13/08/2003Page 28 10:20 <golam shameem08/13/2003

●2 Na

RN 295325-77-8 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 Na

RN 295325-78-9 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na.

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

13/08/2003Page 29 10:20 <qolam shameem08/13/2003

IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-35-4 CAPLUS CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

RN 295325-73-4 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

13/08/2003Page 30 10:20 <golam shameen08/13/2003

9 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1992:633851 CAPLUS

DOCUMENT NUMBER: 117:233851

TITLE:

Preparation of hydrazonoindolones as excitatory

amino acid antagonists INVENTOR (S): Dahl, Bjarne Hugo; Waetjen, Frank

PATENT ASSIGNEE (S): Neurosearch A/S, Den. SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P 0 G

REFERENCE COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO. 1	DATE
211111111111111111111111111111111111111			initiation no.	51111
ED 503340	3.1	10000016	TD 1000 100104	
EP 503349		19920916	EP 1992-103104	19920224
EP 503349		19950104		
R: AT, BE, C	CH, DE	DK, ES, F	R, GB, GR, IT, LI, LU,	MC, NL, PT, SE
US 5164404	A	19921117	US 1991-670061	19910315
ZA 9201328	A	19921125	ZA 1992-1328	19920224
ES 2069330	T3	19950501	ES 1992-103104	19920224
AU 9211225	A1	19920917	AU 1992-11225	19920226
AU 643877	B2	19931125		
CA 2062853	AA	19920916	CA 1992-2062853	19920312
NO 9201000	A	19920916	NO 1992-1000	19920313
NO 180191	В	19961125		
NO 180191	C	19970305		
JP 05078350	A2	19930330	JP 1992-55531	19920313
JP 3407896	B2	20030519		
PRIORITY APPLN. INFO.		20050515	US 1991-670061 A	19910315
THER SOURCE(S):	MAI	RPAT 117:23	3851	
3I				

AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph,(substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 =

Ι

13/08/2003Page 31 10:20 <golam shame: 08/13/2003

(substituted) Ph. -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoyx, NO2, cyano, CP3, SOZMRIRI2; R11, R12 = H, CH2Ph, C1-6 alkyl; or R6R7 or R4R5 = atoms to complete a 4-8 membered (substituted) carbocyclic ring) were prepd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6.7, 8.9-ttrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeoH contg. HClt to give 5-nitro-1H-6.7, 8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC50's of 1-100

IT 144405-80-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antagonist for excitatory amino acids

RN 144405-80-1 CAPLUS

Double bond geometry as shown.

IT 136622-60-1P 136622-61-2P 136622-65-6P 136622-68-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for excitatory amino acid antaconists)

RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)

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RN 136622-65-6 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 136622-68-9 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

=> d 16 ibib abs hitstr tot

ANSWER 1 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:301852 CAPLUS

DOCUMENT NUMBER: 139:85609

TITLE: Phototransamidation as a method for the synthesis of

N-glycosyl asparagines

AUTHOR(S): Vizvardi, Kristof; Kreutz, Christian; Davis, Alexander S.; Lee, Vincent P.; Philmus, Benjamin J.; Simo,

Ondrej; Michael, Katja

CORPORATE SOURCE:

Department of Chemistry, University of Hawaii, Honolulu, 96822, USA

Chemistry Letters (2003) 32(4), 348-349 CODEN: CMLTAG; ISSN: 0366-7022 SOURCE:

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

N-Glycosyl asparagines were synthesized by a mild photochem. coupling method in which a photoreactive amide of an aspartic acid's .beta.-carboxyl group is condensed with an aminosaccharide. Upon excitation, the .gamma.-carbon becomes susceptible to nucleophilic attack and the obtained N-glycosyl asparagines, which may be useful building

13/08/2003Page 33 10:20 <golam shame: 08/13/2003

blocks for the synthesis of N-glycopeptides and neoglycopeptides, are generated in good yields.

TΤ 553681-57-5P 553681-58-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of N-qlycosyl asparagines by using a mild photochem.

transamidation step)

RN 553681-57-5 CAPLUS

1H-Indole-1-butanoic acid, 5-bromo-2,3-dihydro-7-nitro-.gamma.-oxo-.alpha.-[[(phenylmethoxy)carbonyl]amino]-, 2-propenyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

553681-58-6 CAPLUS RN

CN 1H-Indole-1-butanoic acid, 5-bromo-.alpha.-[[(9H-fluoren-9ylmethoxy) carbonyl] amino] -2,3-dihydro-7-nitro-.gamma.-oxo-, 2-propenyl ester, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

2002:814100 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:325331

TITLE: Preparation of 7-nitroindoline derivatives for use as

photochemical-precursors cabable of releasing bigactive effector moieties

INVENTOR (S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

13/08/2003Page 34 10:20 <golam shame: 08/13/2003

LANGUAGE:

GT

English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2002083639 A1 20021024 WO 2002-GB971 20020308 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: GB 2001-9093 A 20010411 OTHER SOURCE(S): CASREACT 137:325331: MARPAT 137:325331

AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector molety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CC14 to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tertbutoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive amino acids or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

DN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME) 13/08/2003Page 35 10:20 <golam shameem08/13/2003

295325-62-1 CAPLUS RN

1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and acetic anhydride)

RN 444189-55-3 CAPLUS

1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 2001:759359 CAPLUS

DOCUMENT NUMBER: 136:210906

TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-

amino acids as novel, fast caged neurotransmitters

AUTHOR (S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

13/08/2003Page 36 10:20 <golam shame: 08/13/2003

CORPORATE SOURCE: National Institute for Medical Research, London, NW7

1AA, UK

Journal of Neuroscience Methods (2001), 112(1), 29-42 SOURCE:

CODEN: JNMEDT: ISSN: 0165-0270

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

Reagents capable of rapid and efficient release of neuroactive amino acids (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI) -caged and 4-methoxy-7-nitroindolinyl (MNI) -caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time.ltoreq.0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed nagonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem, that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

239135-33-2 239135-34-3 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or Chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel,

fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-

(phosphonooxy) pentyl] - , .alpha.-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} 0 \\ \text{MeO-C-CH}_2 \\ \\ \text{NO}_2 \\ \end{array} \\ \begin{array}{c} \text{C-(CH}_2)_4 - \text{OPO}_3\text{H}_2 \\ \\ \end{array}$$

DN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2oxoethyl) -7-nitro-.delta.-oxo-, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentancic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USBS (USES) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-amd 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)
295325-58-5 CAPLUS

RN 29532

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 402470-76-2 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:698992 CAPLUS

DOCUMENT NUMBER: 134:71451

TITLE: Effects of Aromatic Substituents on the Photocleavage

of 1-Acyl-7-nitroindolines AUTHOR(S):

Papageorgiou, G.; Corrie, J. E. T.

CORPORATE SOURCE: National Institute for Medical Research, The Ridgeway,

Mill Hill, London, NW7 1AA, UK SOURCE:

Tetrahedron (2000), 56(41), 8197-8205 CODEN: TETRAB: ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English OTHER SOURCE(S): CASREACT 134:71451

Photolysis of 1-acyl-7-nitroindolines in aq. soln. gives a carboxylic acid and a 7-nitrosoindole. These compds. are useful as photolabile precursors

of carboxylic acids, particularly neuro-active amino acids. 4-Methoxy substitution improved the photolysis efficiency

degree 2-fold but a 4-dimethylamino analog was essentially inert. 5-alkyl substituent, that blocks unwanted nitration at this position,

reduced the beneficial effect of the 4-methoxy group. 295325-60-9P 295325-61-0P 295325-62-1P

314762-04-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(effect of arom. substituents on photocleavage of 1-acyl-7-

nitroindolines)

PN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

295325-61-0 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

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RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 314762-04-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-(9CI) (CA INDEX NAME)

IT 295325-98-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(effect of arom. substituents on photocleavage of 1-acyl-7nitroindolines)

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

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REFERENCE COUNT:

PATENT INFORMATION:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 5 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                            2000:666708 CAPLUS
DOCUMENT NUMBER:
                            133:252301
                            Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive
TITLE:
                            effector moieties.
                            Corrie, John Edgar Thomas; Papageorgiou, George
INVENTOR(S):
PATENT ASSIGNEE(S):
                            Medical Research Council, UK
SOURCE:
                            PCT Int. Appl., 70 pp.
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT:
```

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2000055133 A1 20000921 WO 2000-GB1039 20000320 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, BS, FI, OB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, MZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20000320 EP 1161418 A1 20011212 EP 2000-911095 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002539196 T2 20021119 JP 2000-605564 20000320 PRIORITY APPLN. INFO.: GB 1999-6192 A 19990318 WO 2000-GB1039 W 20000320

OTHER SOURCE(S): MARPAT 133:252301

т

AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH2)nY; N(COZ)(CH2)nY, N(CHZ)nYI)(CH2)nYI, R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, COZH, salts thereof, OPO32-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety or a group capable of being coupled in the effector moiety on irradn., typically by flash irradn. with UV light, were prepd. I can be used to deliver biol. active effector moieties such as neuroactive amino acids or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO3 in CF3COZH to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-

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acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolysis recovery of GABA was 88%.

I 299135-32-IP 239135-33-2P 239135-34-3P 239135-33-8P 295325-58-5P 295325-59-6P 295325-63-2P 295325-62-IP 295325-63-2P 295325-64-3P 295325-65-4P 295325-66-5P 295325-67-6P 295325-68-7P 295325-75-6P 295325-77-8P 295325-78-9P 295325-75-8P 295325-78-9P 295325-83-8-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified), BSU (Biological use, unclassified), SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation): HSSS (Uses)

(Preparation); USES (Uses) (prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties) 239135-32-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C-CH}_2 \\ \text{NO}_2 \\ \end{array} \begin{array}{c} \text{C-(CH}_2)_3 - \text{CO}_2\text{H} \\ \end{array}$$

RN

RN 239135-33-2 CAPLUS CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, alpha.-methyl ester (9CI) (CA INDEX NAME)

RN 239135-34-3 CAPLUS CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobuty1)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-59-6 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]eth oxylphenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

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RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-61-0 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

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RN 295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)penty1]-(9CI) (CA INDEX NAME)

RN 295325-65-4 CAPLUS

CN Glycine, N-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

RN 295325-66-5 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-(9CI) (CA INDEX NAME)

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OMe Ne No C- (CH₂)
$$_3$$
 - NH₂

RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

Me No C (CH2)
$$_4$$
 - OPO $_3$ H2

RN 295325-69-8 CAPLUS

CN Glycine, N-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]-(9CI)(CA INDEX NAME)

RN 295325-72-3 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME) 13/08/2003Page 46 10:20 <golam shameen08/13/2003

$$\begin{array}{c|c} & & & \\ & & & \\ \text{MeO}-\text{C}-\text{CH}_2 & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 295325-74-5 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)

$$_{\mathrm{NO_{2}}}$$
 $_{\mathrm{NO_{2}}}$ $_{\mathrm{C}^{-}}$ (CH₂) $_{\mathrm{4}}$ $_{\mathrm{OPO_{3}H_{2}}}$

RN 295325-75-6 CAPLUS

CN

1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C-CH}_2 \\ \text{NO}_2 \\ \end{array} \begin{array}{c} \text{C-(CH}_2)_4 - \text{OPO}_3\text{H}_2 \\ \end{array}$$

●2 Na

RN 295325-77-8 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

13/08/2003Page 47 10:20 <golam shameem0=8/13/2003

●2 Na

RN 295325-78-9 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME) 13/08/2003Page 48 10:20 <golam shameem08/13/2003

RN 295325-73-4 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 12 ACCESSION NUMBER:

1999:390833 CAPLUS 131:165619

9

DOCUMENT NUMBER: TITLE:

Photorelease of Carboxylic Acids from

1-Acyl-7-nitroindolines in Aqueous Solution: Rapid and Efficient Photorelease of L-Glutamate

AUTHOR(S): Papageorgiou, George; Ogden, David C.; Barth, Andreas; Corrie, John E. T

National Institute for Medical Research, London, NW7 CORPORATE SOURCE: 1AA, UK

CAPLUS COPYRIGHT 2003 ACS on STN

SOURCE: Journal of the American Chemical Society (1999),

121(27), 6503-6504

CODEN: JACSAT; ISSN: 0002-7863 PUBLISHER: American Chemical Society

Journal

DOCUMENT TYPE:

13/08/2003Page 49 10:20 <golam shame: 08/13/2003

LANGUAGE:

English

AB Photorelease of biol. active compds. from photocleavable (caged) precursors is a useful tool to study biol. processes but rapid, efficient release of neuroactive amino acids has been elusive. We now describe stable 1-acyl-7-nitro-indolines that rapidly and efficiently photorelease carboxylates, including L-glutamate, in neutral aq. soln. L-Glutamate precursors were tested in primary cultures of rat cerebellar granule neurons for their pharmacol. properties and ability to activate glutamate ion channels upon photolysis,

239135-32-1P 239135-34-3P IT

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in

cerebellar granule neurons)

RN 239135-32-1 CAPLUS

CN

1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \bigcap \\ \text{MeO-C-CH}_2 \\ \bigcap \\ \text{NO}_2 \\ \bigcap \\ \text{C-(CH}_2)_3 - \text{CO}_2 \text{H} \end{array}$$

RN 239135-34-3 CAPLUS

1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-CN oxoethyl) -7-nitro-.delta.-oxo-, (.alpha.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 239135-33-2P 239135-35-4P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC

(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

239135-33-2 CAPLUS RN CN

1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy) pentyl] -, .alpha.-methyl ester (9CI) (CA INDEX NAME) 13/08/2003Page 50 10:20 <golam shameem08/13/2003

RN 239135-35-4 CAPLUS

IT 239135-40-1P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-40-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 239135-39-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

13/08/2003Page 51 10:20 <golam shameem08/13/2003

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:884192 CAPLUS

DOCUMENT NUMBER: 123:285774

TITLE: Preparation of isatin-derivative excitatory

amino acid receptor antagonists
INVENTOR(S): Watjen, Frank

PATENT ASSIGNEE(S): Neurosearch A/S, Den.

SOURCE: Eur. Pat. Appl., 10 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 667340	A1	19950816	EP 1995-610002	19950117
R: AT, BE,	CH, DE	, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, MC, NL, PT, SE
US 5565580	A	19961015	US 1995-372598	19950113
JP 08034771	A2	19960206	JP 1995-10136	19950125
PRIORITY APPLN. INFO	. :		DK 1994-114	19940127
OTHER SOURCE(S):	CA	SREACT 123:28	35774; MARPAT 123:28	5774
GI				

13/08/2003Page 52 10:20 <golam shameem0-8/13/2003

AB The title compds. (I; R1-R4, R11-R14 = H, halogen, CF3, CN, NO2; .gtoreq.1 of which must .noteq. H; for R21 and R22 one is H and the other is alkyl or both are H), useful as excitatory amino acid (e.g., NMDA, AMPA) receptor antagonists for the treatment of cerebrovascular diseases (no data), Alzheimer's disease (no data), schizophrenia (no data), Parkinsonism (no data), etc. (no data), are prepd. by heating isatin derivs. (II; R = alkyl, PhCH2; or III; R25 = alkyl, aralkyl) with dihydroindolediones (IV). Thus, 5,7-dinitroindole-2,3-dione and PhCH2NH2 were heated together in AcOH and BtOH, producing I (R1 = R3 = R11 = R13 = R21 = R22 = H, R2 = R4 = R12 = R14 = NO2) (V), m.p. >>>0.degree.. V demonstrated a ED50 of 0.1 mg/kg (i.v.) for breaking 2-amino-3-(3-hydroxy-5-tert-butyl-4-isoxazolyl)propionic acid-induced rigidity in mice.

II 136622-60-1, 5,7-Dinitro-1-methylindole-2,3-dione

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of isatin-deriv. excitatory amino acid

receptor antagonists)
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

L6 ANSWER 8 OF 12 ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

CAPLUS COPYRIGHT 2003 ACS on STN 1995:761965 CAPLUS

123:340088

Isatin oxime derivatives, their preparation and use as antagonists of excitatory amino

13/08/2003Page 53 10:20 <qolam shame: 08/13/2003

acids at the AMPA receptor

Waetjen, Frank; Dahl, Bjarne H.; Drejer, Jorgen; INVENTOR (S):

Jensen, Lein H.

PATENT ASSIGNEE(S): NeuroSearch A/S, Den.

SOURCE: U.S., 8 pp. Cont.-in-part of U.S. 5,242,918.

CODEN: USXXAM DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 5436250	A	19950725	US 1993-88328 19930707
ZA 9206491	A	19930308	ZA 1992-6491 19920827
AU 9224820	A1	19930405	AU 1992-24820 19920827
AU 655672	B2	19950105	
US 5242918	A	19930907	US 1992-936579 19920827
PL 170920	B1	19970228	PL 1992-302584 19920827
CZ 282759	В6	19970917	CZ 1994-395 19920827
SK 280578	В6	20000410	SK 1994-238 19920827
NO 9400676	A	19940427	NO 1994-676 19940225
PRIORITY APPLN. INFO.	:		US 1991-751165 B2 19910828
			US 1992-831851 B2 19920205
			US 1992-936579 A2 19920827
			WO 1992-EP1999 A 19920827

OTHER SOURCE(S): GI

MARPAT 123:340088

II

Isatin oxime derivs. I are claimed wherein R4 and R5 independently are AB hydrogen, halogen, CF3, CN, NO2 or SO2NR1R2 wherein R1 is hydrogen or Cl-6-alkyl which may be straight, branched or cyclic, R2 is hydrogen or C1-6-alkyl which may be straight, branched or cyclic, or wherein R1 and R2 together represent (CH2)nA(CH2)m, wherein A is O, S, CH2 or NRI, wherein RI is H, C1-6-alkyl which may be straight, branched or cyclic, n is 0, 1, 2, 3, 4, 5 and m is 0, 1, 2, 3, 4, 5; Q is NOH, O; Z = O, S, NRII, .alpha.-C(:0)NRIII-.beta., NRIVC(:0)NRV , .alpha.-OC(:0)-.beta., wherein RII, RIII, RIV and RV independently are hydrogen, benzyl, (C:0)CF3, C1-6-acyl, C1-6-alkoxy which may be branched or cyclic, or C1-6-alkyl which may be straight, branched or cyclic, CH2CO2RVI wherein RVI is hydrogen or C1-6-alkyl which may be straight or branched; X is (CH2)o wherein o is 0, 1, 2, or 3; Y is (CH2)p wherein p is 0, 1, 2 or 3; .alpha. and .beta. indicate attachment points. I exhibit valuable biol. properties because of their strong excitatory amino acid (EAA) antagonizing properties at the AMPA [(RS) -. alpha. -amino-3-hydroxy-5methyl-4-isoxazolepropionic acid] binding site. Thus, e.g., oximation of 7-methyl-1,6,7,8-tetrahydrobenzo[2,1-b:3,4-c'ldipyrrole-2,3-dione (prepn. given) with hydroxylamine hydrochloride afforded 7-methyl-1,6,7,8tetrahydrobenzo[2,1-b:3,4-c']dipyrrole-2,3-dione-3-oxime (II) which exhibited an IC50 of 1.mu.M in the AMPA binding assay.

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62368-07-4, 1-Acetyl-5-bromo-7-nitroindoline RL: RCT (Reactant); RACT (Reactant or reagent) (isatin oxime derivs., their prepn. and use as antagonists of excitatory amino acids at the AMPA receptor)

RN 62368-07-4 CAPLUS

CN 1H-Indole, 1-acetyl-5-bromo-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:416352 CAPLUS

DOCUMENT NUMBER:

122:187389 TITLE: Preparation of 3-(2-oxo-3-indolylideneimino)-2-

hydroxyindoles as excitatory amino

acid antagonists

INVENTOR(S): Waetjen, Frank; Drejer, Jorgen; Jensen, Leif Helth

PATENT ASSIGNEE(S): Neurosearch A/S, Den. Eur. Pat. Appl., 9 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 629615	A1	19941221	EP 1994-610030	19940601
EP 629615	B1	20000223		
R: AT, BE,	CH, DE	, DK, ES, 1	FR, GB, GR, IE, IT, LI	, LU, MC, NL, PT, SE
AT 189889	E	20000315	AT 1994-610030	19940601
US 5478859	A	19951226	US 1994-259016	19940613
PRIORITY APPLN. INFO.	:		DK 1993-696	19930614
OTHER SOURCE(S):	MA	RPAT 122:18	37389	
GI				

Ι

13/08/2003Page 55 10:20 <golam shame 08/13/2003

alkyl) were prepd. Thus, 5,7-dinitro-1-methylindole-2,3-dione was refluxed with PhCH2NH2 in EtoH contg. HOAc to give I (R2 = R4 = R12 = R14 = N02, R21 = R22 = Me) which had ED50 of 0.1mg/kg i.v. against .alpha.-amino-3-hydroxy-5-tert-butyl-4-isoxazolepropionic acid-induced riqidity in mice.

IT 161557-74-0P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory amino acid antagonists)

RN 161557-74-0 CAPLUS

2H-Indol-2-one, 1,3-dihydro-3-[(2-hydroxy-1-methyl-5,7-dinitro-1H-indol-3-yl)imino]-1-methyl-5,7-dinitro-(9CI) (CA INDEX NAME)

IT 136622-60-1 136623-08-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory
amino acid antagonists)

RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

RN 136623-08-0 CAPLUS

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L6 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1992:633851 CAPLUS

DOCUMENT NUMBER: 1992:633851

TITLE: Preparation of hydrazonoindolones as excitatory

amino acid antagonists

INVENTOR(S): Dahl, Bjarne Hugo; Waetjen, Frank

PATENT ASSIGNEE(S): Neurosearch A/S, Den. SOURCE: Eur. Pat. Appl., 13 pp.

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
			EP 1992-103104 19920224	
EP 503349	B1	19950104		
			FR, GB, GR, IT, LI, LU, MC, NL, PT, SE	
US 5164404	A	19921117	US 1991-670061 19910315	
ZA 9201328		19921125	ZA 1992-1328 19920224	
ES 2069330	T3	19950501	ES 1992-103104 19920224	
AU 9211225	A1	19920917	AU 1992-11225 19920226	
AU 643877	B2	19931125		
CA 2062853	AA	19920916	CA 1992-2062853 19920312	
NO 9201000	A	19920916	NO 1992-1000 19920313	
NO 180191	В	19961125		
NO 180191	C	19970305		
JP 05078350	A2	19930330	JP 1992-55531 19920313	
JP 3407896	B2	20030519		
PRIORITY APPLN. INFO	. :		US 1991-670061 A 19910315	
OTHER SOURCE(S):	MAI	RPAT 117:23	33851	
GI				

AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph, (substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 = (substituted) Ph, -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoxy, N02, cyano, CP3, SO2NR1R12; R11, R12 = H, CH2Ph, C1-6 alkyl; or R6R7 or R4R5 = atoms to complete a 4-8 membered (substituted) carbocyclic ring) were prepd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6,7,8,9-ttrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeOH contg. HC1 to give 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-Kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC50's of 1-100 .mu.M.

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as antagonist for excitatory amino acids

13/08/2003Page 57 10:20 <golam shame@ 08/13/2003

RN 144405-80-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[(2-nitrophenyl)hydrazone], (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

IT 136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for excitatory amino acid

antagonists)

RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)

RN 136622-65-6 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl) - (9CI) (CA INDEX NAME)

13/08/2003Page 58 10:20 <golam shameem08/13/2003

RN 136622-68-9 CAPLUS CN

1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 11 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1991:583089 CAPLUS

DOCUMENT NUMBER: TITLE:

115:183089

INVENTOR (S):

Preparation of isatin derivatives as central nervous system (CNS) agents

Watjen, Frank; Drejer, Jorgen; Jensen, Leif Helth

PATENT ASSIGNEE (S):

Neurosearch A/S, Den.

SOURCE:

Eur. Pat. Appl., 14 pp. CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
EP 432648	A2	19910619	EP 1990-123474 19901206
EP 432648	A3	19910925	
EP 432648	B1	19950802	
R: AT, BE,	CH, DE	, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE
ZA 9009479	A	19910925	ZA 1990-9479 19901126
JP 03204856	A2	19910906	JP 1990-330898 19901130
JP 3057095	B2	20000626	
FI 9005943	A	19910612	FI 1990-5943 19901203
ES 2077623	T3	19951201	ES 1990-123474 19901206
CA 2031756	AA	19910612	CA 1990-2031756 19901207
CA 2031756	C	20020611	
NO 9005320	A	19910612	NO 1990-5320 19901210
NO 174464	В	19940131	
NO 174464	C	19940511	
AU 9067920	A1	19910613	AU 1990-67920 19901210
AU 629075	B2	19920924	
US 5198461	A	19930330	US 1991-710790 19910605
PRIORITY APPLN. INFO	. :		DK 1989-6248 A 19891211
			DK 1989-6470 A 19891219
			DK 1990-85 A 19900112

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A 19900112 DK 1990-86 DK 1990-363 A 19900212 DK 1990-2093 A 19900831 B2 19901207 US 1990-624409

OTHER SOURCE(S):

MARPAT 115:183089

AB Isatin derivs. [I; R1 = H, linear or branched C1-6 alkyl, C3-7 cycloalkyl, (substituted) Ph, PhCH2, OH, acyl, etc.; R2 = H, PhCH2; linear or branched C1-6 alkyl, C3-7 cycloalkyl; R4-R7 = H, linear or branched C1-6 alkyl, C1-6 alkoxy, Ph, halo, NO2, cyano, etc.], esp. useful in treating CNS conditions sensitive to excitatory amino acids. To a stirred soln. of diketone II (R1 = H, Z = O) in DMF was added 55% NaH in mineral oil, followed by MeI with stirring at room temp. to give II (R1 = Me, Z = O), which was treated with MeONH2.HCl and Na2CO3 at room temp. to give oxime II (R1 = Me, Z = MeON). Also prepd. were 54 addnl. I which were effective in treating CNS disorders at 30-100 mg/day.

II

136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of, in prepn. of central nervous agent)

136622-60-1 CAPLUS

RN CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)

13/08/2003Page 60 10:20 <golam shame@ 08/13/2003

1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl) - (9CI) (CA INDEX NAME)

RN 136622-68-9 CAPLUS

1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester CN (9CI) (CA INDEX NAME)

136622-70-3P 136622-72-5P 136622-80-5P IT

136622-84-9P 136622-85-0P 136622-90-7P 136623-03-5P 136623-07-9P 136623-08-0P

136623-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as central nervous agent)

RN 136622-70-3 CAPLUS

CN

1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-(0-methyloxime) (9CI) (CA INDEX NAME)

RN 136622-72-5 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro-, 3-(0-methyloxime) (9CI) (CA INDEX NAME)

RN 136622-80-5 CAPLUS 13/08/2003Page 61 10:20 <golam shame 08/13/2003

RN 136622-84-9 CAPLUS

CN 1H-Indole-2,3-dione, 6-methoxy-1-methyl-5,7-dinitro-, 3-(0-methyloxime) (9CI) (CA INDEX NAME)

RN 136622-85-0 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-3-(methoxyimino)-5,7-dinitro-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 136622-90-7 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-oxime (9CI) (CA INDEX NAME)

RN 136623-03-5 CAPLUS

CN lH-Indole-1-acetic acid, 2,3-dihydro-3-(hydroxyimino)-5,7-dinitro-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

13/08/2003Page 62 10:20 <golam shameem08/13/2003

136623-07-9 CAPLUS RN

1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME) CN

RN 136623-08-0 CAPLUS CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[0-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)

RN 136623-09-1 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2-oxo-3-[(phenylmethoxy)imino]-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1978:191454 CAPLUS

DOCUMENT NUMBER:

88:191454

TITLE:

Synthesis of protected peptide acids and esters by photosolvolysis of 1-peptidyl-5-bromo-7-nitroindolines AUTHOR (S): Goissis, Gilberto; Erickson, Bruce W.; Merrifield, R.

CORPORATE SOURCE: SOURCE:

Rockefeller Univ., New York, NY, USA Pept., Proc. Am. Pept. Symp., 5th (1977), 559-61. Editor(s): Goodman, Murray; Meienhofer, Johannes.

Wiley: New York, N. Y. CODEN: 370BAT Conference

DOCUMENT TYPE: LANGUAGE:

English Me3CO2C-Gly-Val-Bni (I, Bni = 5-bromo-7-nitro-4-indoly1) and Me3CO2C-Leu-Ala-Bni (II) were prepd. in 45-50% yields. Indoline was treated with Me3Co2CNHCHRCO2H (R = Me, CHMe2) to give Me3Co2CNHCHRCOR1 (R1 = 1-indoliny1) which was treated with CF3CO2H, brominating, and nitrating to give CF3CONHCHRCOBni which was deacylated and coupled with the appropriate amino acid deriv. to give I or II. The photolysis of I and II in aq. CH2Cl2-dioxane gave 80-1% of Me3CO2C-Gly-Val-OH and Me3CO2C-Leu-Ala-OH. The photolysis in PhCH2OH gave

a mixt. of peptide acid and ester. IT 66414-97-9 66414-98-0 66414-99-1

RL: RCT (Reactant); RACT (Reactant or reagent) (photolysis of)

ΡN 66414-97-9 CAPLUS

CN 1H-Indole, 5-bromo-2,3-dihydro-7-nitro-1-(trifluoroacetyl)- (9CI) (CA

RN 66414-98-0 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 66414-99-1 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]-(9CI) (CA INDEX NAME)

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66414-92-4P 66517-34-8P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and deacylation of)

66414-92-4 CAPLUS

RN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-CN oxoethyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

66517-34-8 CAPLUS RN

Acetamide, N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-CN methylpropyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 66414-93-5P 66414-94-6P 66415-03-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and peptide coupling with)

RN 66414-93-5 CAPLUS

CN 1H-Indole, 1-(2-amino-1-oxopropyl)-5-bromo-2,3-dihydro-7-nitro-, (S)- 13/08/2003Page 65 10:20 <golam shame 08/13/2003

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 66414-94-6 CAPLUS

CN 1H-Indole, 1-(2-amino-3-methyl-1-oxobutyl)-5-bromo-2,3-dihydro-7-nitro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 66415-03-0 CAPLUS

CN Acetamide, 2-amino-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 66414-95-7P 66414-96-8P 66415-04-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and photolysis of)

RN 66414-95-7 CAPLUS

Br

CN Carbamic acid, [2-[[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-y1)carbonyl]-2-methylpropyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester, (S)- (9C1) (CA INDEX NAME)

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Absolute stereochemistry.

RN 66414-96-8 CAPLUS

CN Carbamic acid, [1-[[[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-oxoethyl]amino]carbonyl]-3-methylbutyl]-, 1,1-dimethylethylester, [5-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 66415-04-1 CAPLUS

CN Glycinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl-L-alanyl-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)-(9CI) (CA INDEX NAME)

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=> LOG Y COST IN U.S. DOLLARS	SINCE FILE	TOTAL SESSION
FULL ESTIMATED COST	95.99	244.35
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -12.37	TOTAL SESSION -12.37

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